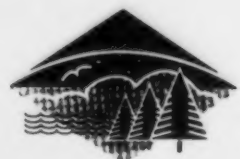


**WINEFRED LAKE AND GRIST LAKE  
REGIONAL INTEGRATED DECISION**

**April, 2000**





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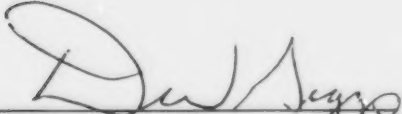
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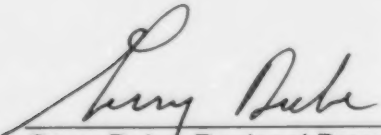
### APPROVAL STATEMENT

The Winefred Lake and Grist Lake Regional Integrated Decision (RID) is hereby approved as the policy of the Northeast Boreal Environmental Resource Committee (ERC) for the management of the Winefred Lake and Grist Lake planning area. The primary goal of this document is to provide future direction on the use and allocation of land and resources within the planning area.



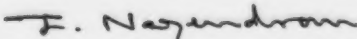
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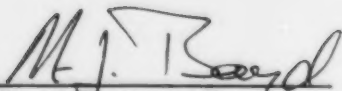
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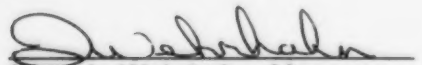
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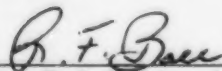
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## **EXECUTIVE SUMMARY**

Winefred Lake and Grist Lake are located in a fragile and relatively remote area in northeast Alberta. The lakes lie southeast of Conklin, roughly between the urban area of Fort McMurray and the town of Lac La Biche.

### **INTRODUCTION**

Alberta Environment initiated development of this Regional Integrated Decision (RID) document in response to several stakeholder concerns over existing and proposed recreation and industrial development impacts near the lakes. Stakeholders were specifically concerned with the future of the Winefred Lake fishery and aesthetic resource. The major issues requiring resolution were 1) whether the Winefred and Grist Lake area should be maintained as a wilderness lake destination or developed into a general recreation lake area and 2) what level of future access and development should be appropriate for the planning area. In looking at possible resolutions, two additional factors needed consideration. First, completion of Highway 881 will likely bring significant increased sport fishing and domestic fishing to the area in the next two to five years with the easier access. Second, there is a high probability that an all weather road may be built into the Janvier Indian Reserve located on the north end of Winefred Lake adjacent to the planning area. This may also have impacts on usage to the planning area.

### **WHAT IS A REGIONAL INTEGRATED DECISION (RID)?**

A Regional Integrated Decision (RID) is a type of local land management plan that addresses and provides resolution of specific and urgent public land and resource issues within a small planning area. It is developed at the local level through public input and with the involvement of all affected government agencies. A RID is developed based on principles of coordination, cooperation, communication and consultation, and does not apply to privately owned lands.

### **PURPOSE OF THE WINEFRED LAKE AND GRIST LAKE REGIONAL INTEGRATED DECISION (RID)**

The purpose of the Winefred Lake and Grist Lake RID is to:

1. address and resolve whether the Winefred and Grist Lake planning area should be maintained as a wilderness lake or developed into a general recreation lake;
2. address and resolve what level of future access and development is appropriate for the planning area; and
3. provide future direction to the land manager (Alberta Environment) on the use and allocation of public lands and natural resources within the planning area.

## THE PLANNING AREA

The planning area incorporates both Winefred Lake and Grist Lake and the surrounding public land to a maximum of one mile from the lakeshores. The area exists in the Green Area of the province and is managed by Alberta Environment for multiple use.

## PLANNING CONTEXT

Development of the RID followed the planning process outlined below:

1. Initiation - terms of reference
2. Data gathering and analysis
3. Development of a draft Land Management Public Input Document
4. Initial public input/consultation
5. Formulation of resource development guidelines
6. Development of a draft RID document
7. Follow-up public input/consultation
8. RID finalization
9. Implementation

## THE PLANNING TEAM

The Planning Team included representation from Alberta Environment and other provincial departments with specific interests and concerns in the planning area also provided input. A representative from the Municipality of Wood Buffalo assisted in the planning process.

## PUBLIC INPUT

The Initial Public Consultation Process Included:

- Notification of the process, with a copy of the draft *Winefred Lake and Grist Lake Land Management Public Input Document* and a questionnaire to 36 known stakeholders for their review and comment. The intent of the review was to determine the level of support for five land management options that were being considered by the Planning Team. Individuals, groups, developers and industry having specific interests or concerns in the planning area were invited to assist the Planning Team in deciding what long-term land management direction the planning area should take.
- Advertisements in the Fort McMurray, Lac La Biche and Edmonton newspapers invited the public to attend an upcoming Open House/Information Session.
- An Open House/Information Session held in Conklin in October 1998 provided an opportunity for the 24 participants to express their views and concerns to the Planning Team.
- 25 returned questionnaire responses to the Planning Team.



### Stakeholder Recommendation

The public was asked at the Open House/Information Session and in the questionnaire which of two potential long-term goals for the planning area they would support:

1. Maintain the Winefred and Grist Lake planning area as a wilderness lake destination,  
or
2. Develop the Winefred and Grist Lake planning area as a general recreation lake area.

### Options

Based on their preferred type of lake experience, stakeholders were then asked to consider what level of access and development they felt appropriate for the Winefred and Grist Lake planning area. The Planning Team indicated that the amount and type of development and allowable access could have implications for the type of future lake experience that would exist for users. Stakeholders were also asked to consider whether the potential land and water management consequences of their preference would be acceptable.

Five land management options were presented for Stakeholder consideration. Each option suggested possible future implications to consider involving fisheries, wildlife, development control, recreation, tourism and traditional users. These implications illustrated the types of concerns that would need to be addressed if development proceeded under a particular option. It was noted that many of the implications could be mitigated by conditions put on specific development approvals relating to factors such as location, setbacks, timing and vegetation retention. The following five land management options, ranging from extreme restrictions to no special restrictions on access and development, were provided to assist stakeholders:

Level 1: Restricted Developments\*

Level 2: Upgrade Existing Access to Existing Facilities to All Weather\*\*

Level 3: Expansion of Existing Facilities\*\*

Level 4: Restricted New Development\*\*

Level 5: No Restrictions at this Time (Closest to Present Situation)\*\*

- \* If a decision was made to maintain a wilderness lake, then only Level 1 would be considered appropriate in keeping with the wilderness theme.
- \*\* If a decision was made to develop a general recreation lake, then Levels 2-5 could be considered appropriate options.

### The Follow-Up Public Consultation Process Included:

- Notification of two upcoming follow-up information sessions, along with a copy of the draft *Winefred Lake and Grist Lake Management Plan* and a questionnaire to known Stakeholders for their review. The intent of the review was to obtain final public comments on the document.

- Advertisements in the Bonnyville, Lac La Biche and St. Paul newspapers and on a local radio station indicated that a management plan for the Winefred Lake and Grist Lake planning area had been written after receiving public input and was now available for public review. The notification also mentioned that there were two upcoming information sessions to be held on the draft management plan.
- Two follow-up public information sessions held in February 1999 provided an opportunity for stakeholders to express their views and concerns to the Planning Team. The Conklin session was attended by 11 participants and the Lac La Biche session by 14 participants.
- 38 questionnaire responses returned to the Planning Team.
- Follow-up phone calls after the February 1999 public meetings were made in an attempt to confirm input from all known stakeholders.

## THE DECISION

The unique terrain, the sensitivity of the environment and the objectives of the land and resource management agencies were considerations in the planning process. However, public input played a significant role and a high priority was given to Stakeholder needs in resolving the issues and determining the future land management direction of the Winefred Lake and Grist Lake planning area.

The majority of the written respondents and open house participants expressed a desire to manage this area in a manner to retain the existing wilderness quality of the environment.

Based on the public input direction received:

1. The overall management goal adopted by the Planning Team is to maintain the Winefred Lake and Grist Lake planning area as a Wilderness Lake.
2. In achieving this goal, the RID will strive to place strong emphasis on retention of the natural, wildland character of the planning area and provide the basis and direction for land management decisions within the planning area. Resources will be managed such that the natural integrity of the area will be conserved.
3. As a guideline, the Winefred Lake and Grist Lake planning area will be managed as per Land Management Option Level 1, Restricted Developments.
  - No new access development within 400m of the high water mark of the lakeshores.
  - Restrict exploration for oil and gas within 400m of the lake.
  - No new trapping cabins on lakeshore.
4. The RID will:
  - Clarify long-term land use and appropriate operating guidelines.
  - Recommend changes to existing guidelines as appropriate.
  - Ensure appropriate coordination between resource agencies that have resource obligations in the planning area.
5. Provisions have been made so that Formal Review of the RID can occur five years from implementation of the RID.

## **WINEFRED LAKE AND GRIST LAKE AREA HISTORY**

Winefred Lake is named after the wife of R.E. Young, an early Dominion Land Surveyor in the area. Traditional use includes domestic, sport and previously, commercial fishing. Grist Lake was originally called Island Lake in 1918. The name later changed to the surname of a settler in the area. Use has been predominantly sport fishing for lake trout.

### **HISTORIC FUR TRADING POST?**

A Forest Ranger that has surveyed the area suggests a Fur Trading Post may have existed at the north end of Winefred Lake. The date that the post may have been established or closed is unknown because official records do not document the post.

### **A HISTORY OF COMMERCIAL FISHING**

Winefred Lake has a long history of commercial fishing. A Mr. Lobay and Mr. Pinsky from Cold Lake built a fish plant on the lake. A crew of 40 men would spend a month and a half every winter netting and cleaning fish at the plant. W. R. Menzies Sr. later bought the plant. However, it finally closed in 1965.

### **A BASE FOR GUIDED FISHING**

Richard York bought the fish plant and property in 1965 and used the building as a base for guided fishing. He was a partner with Mr. George Maunder in Grist Haven Lodge on Grist Lake (established in 1961 and sold to Mr. Kossey in 1987). In 1990, Alberta Forestry, Lands and Wildlife approved the establishment of a 40-stall camp on the lease site in association with Grist Lake Lodge.

### **DESIGNATED A TROPHY LAKE**

Richard York helped Winefred Lake be designated a trophy lake in 1969. The primary reason for its designation was protection of the trophy walleye and pike. This was a mainly fly-in fishing lake until the development of a dry weather road in the late 1970s. In 1979, Mr. George Maunder and Mr. Fred Roustsum hand built a log lodge for fly-in fishing at the south end of Winefred Lake. This lodge burned to the ground in 1983 and was later replaced by a more modern structure. They constructed five small visitor cabins in 1989 next to the main lodge.

### **THE JANVIER BAND RESERVE**

Lands on the north end of Winefred Lake have been granted to the Janvier Band. Presently, only a few homes exist on the reserve.

### **FORESTRY CABIN ON THE LAKESHORE**

A forestry cabin has been on the southwest shore since the 1950s. Presently, Alberta Environment's Natural Resources Service, Enforcement Field Services manages it.

## **1.0 CURRENT LAND USE AND OWNERSHIP**

### **1.01 REGIONAL LOCATION**

Winefred Lake and Grist Lake are relatively remote wilderness lakes located in Northeast Alberta. They lie roughly between Fort McMurray and Lac La Biche, southeast of Conklin (Figure 1).

### **1.02 THE PLANNING AREA**

The planning area incorporates both Winefred Lake and Grist Lake and the surrounding public land to a maximum of one mile from the lakeshore. Both Winefred and Grist Lakes encompass almost the entire township 75 and range 4 west of the 4th meridian. The lake area extends to township 76 in the north and into township 73 in the south (Figure 2). The Grist River connects Winefred Lake to Grist Lake, which lies 4 km south. Winefred Lake is 31,312 acres (12,672 ha) and has an average depth of 28.5 feet (8.7 m) and a maximum depth of 50.2 feet (15.3 m). Grist Lake is 2782 acres (1113 ha) and has an average depth of 62.7 feet (19.1 m) and a maximum depth of 140 feet (42.7 m.)

### **1.03 CURRENT LAND USE AND OWNERSHIP**

The planning area covered by the RID exists in the Green Area of the province and is managed by Alberta Environment for multiple use.

#### Access

Year round access to the planning area is possible by road vehicle or by air. Floatplanes can land on the lakes and wheeled planes can land on the airstrips. In the northeast part of township 73 and range 5, Grist Lake airstrip is 4 km and Kirby airstrip is 15 km from the south shore of Winefred Lake. Kirby airstrip mainly services oilfield facilities. Construction of secondary Highway 881 from Conklin to Fort McMurray has increased the recreational use of Winefred and Grist Lakes.

#### Fisheries

Domestic fishing has steadily increased at Winefred Lake from the late 1970' to the present time. In recent years, domestic fishing has declined at Grist Lake from a record high in 1992. With improved road access over the last 10 to 12 years, use of the fisheries resource at Winefred Lake and Grist Lake for sportfishing has increased. At Winefred Lake, sportfishing primarily focuses on walleye and northern pike. It is heaviest during late spring and early summer with a general decline in the total amount of angling hours (effort) throughout summer and early fall. Sportfishing at Grist Lake mainly focuses on lake trout during late spring, early summer and early fall. Two Commercial fishing lodges currently operate in the planning area 1) Grist Haven Lodge is located on the south shore of Grist Lake and 2) Winefred Lake Lodge lies on the south shore of Winefred Lake.

#### Oil and gas

Active oil and gas development occurs along the south and west portion of Winefred Lake. However, lakeshore reservations limit oil and gas development within the lakeshore buffers. Gas development in the planning area is done for the most part by remote operation with limited all weather access.

#### Recreation

Recreational use of the Winefred Lake area consists mainly of fishing, hunting and camping.

#### Timber

Lakeshore reservations restrict logging from occurring along the lakeshore.

#### Trapping Cabins

Several trappers' cabins exist on the west and east side of Winefred Lake, but are accessible only by all-terrain vehicle, snowmobile or boat.

#### Tourism

The planning area is presently a wilderness based tourism destination for anglers and hunters.











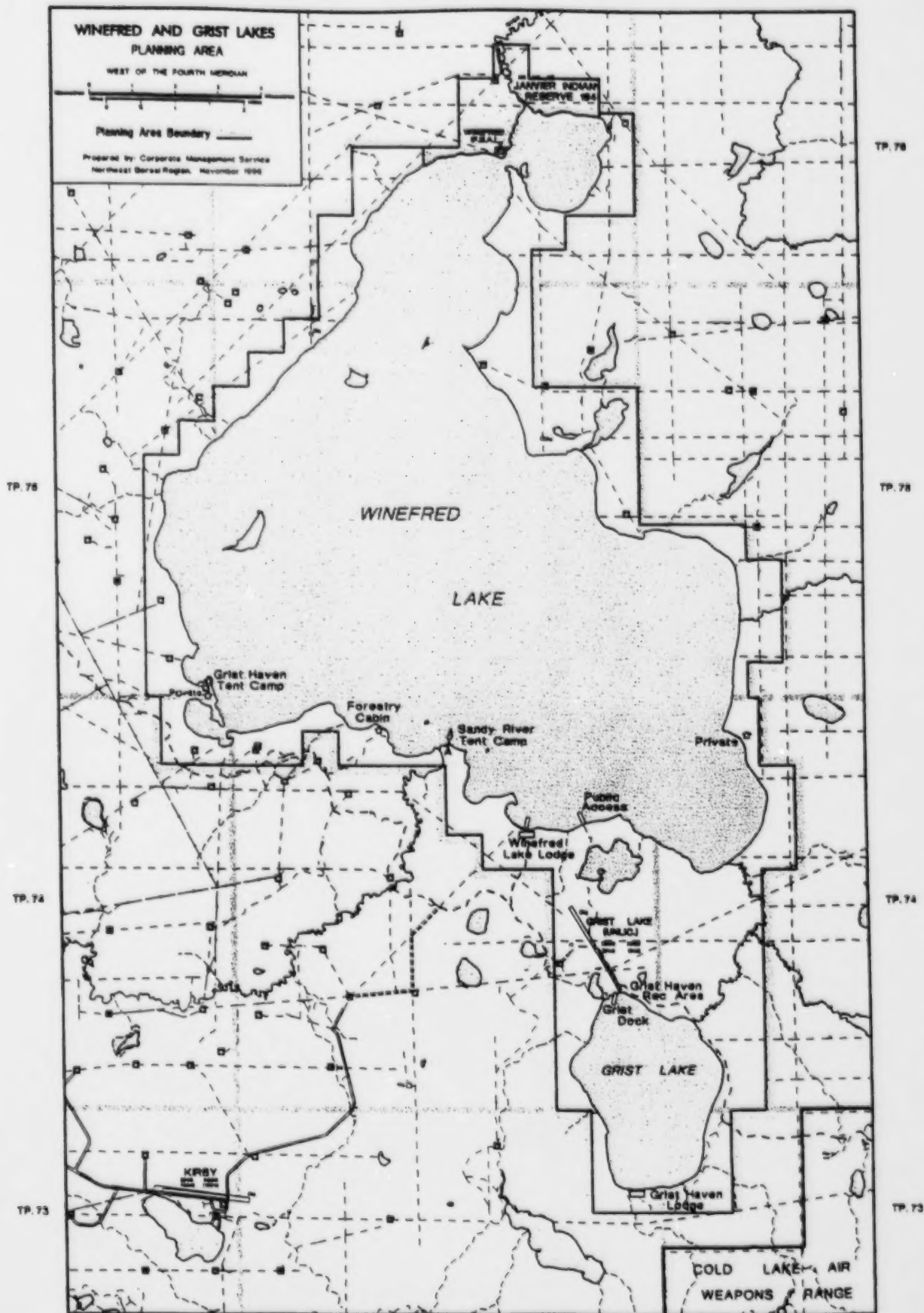


Figure 2 Winefred and Grist Lakes Planning Area



## **2.0 RESOURCE ISSUE DEVELOPMENT GUIDELINES**

### **2.01 FISHERIES ISSUES**

#### Resource Synopsis

##### Winefred Lake

The fisheries in Winefred Lake provide domestic and recreational sportfishing for Northern Pike, Walleye and Lake Whitefish. Until 1998, Winefred Lake was designated as "Trophy Waters" for Northern Pike and Walleye. This designation, however, has been discontinued for all Alberta lakes as of 1998. Winefred Lake will continue to be managed to sustain high quality fishing experiences.

Fish stock, angler and domestic use surveys completed in 1995 indicated that:

- domestic harvest of Walleye, Northern Pike and Lake Whitefish has steadily increased for the past 15 years with nearly a sixfold increase in the harvest of Walleye and Pike since 1990;
- the Lake Whitefish were the most abundant fish species in the test catches and were dominated by fish aged 6 to 12 years. The whitefish population was considered healthy and stable;
- the Northern Pike population was considered healthy and stable.
- the walleye population in Winefred Lake was considered at significant risk of future decline. It is likely that the annual walleye harvest (which does not include winter sport fishery or illegal harvest) is at or exceeds theoretical annual production. Recruitment, hence, annual production, may be limited by access and suitable spawning habitats in the Sandy River.

##### Grist Lake

Grist Lake is a small deep lake. Northern Pike and Lake Trout are the main fish species for recreational sportfishing and domestic fishing.

No studies of fish stock, angler or domestic use have been undertaken on Grist Lake since 1983. Circumstantial evidence suggests that the lake trout stock has declined significantly since then. Although current harvest data is not available, comments from anglers and the current lodge owner indicate that lake trout are declining in size and number. Lake trout are small (0.5-2.7 kg), extremely few fish over 4.5 kg are caught and overall catch rates remain extremely low. Excellent fishing has been reported from time to time, but appears confined to short periods following ice-out when lake trout are still in shallow water. Based on increasing use, extremely low production potential, observed trends in the available data and comments by anglers and the Grist Haven Lodge operators, the lake trout population in Grist Lake is considered at significant risk of future collapse.

### Overview of Resource Management Objectives and Guidelines

Through the development of the RID, the public was asked to provide comments regarding the future management of Winefred Lake and Grist Lake fisheries. Input was provided in response to presentations made in Conklin and at the Provincial Fish and Game Conference in Calgary. Additional comments were received by telephone and through written comments.

Currently, Fisheries Management does not manage the harvest of fish stocks by restricting access to fisheries. Harvest is managed through season, size, and bag limits. However, the selection of a restrictive development scenario will compliment fisheries management goals for Winefred and Grist Lakes. The public input will be used to guide Fisheries Management in the lake management and regulation planning for Winefred and Grist Lakes.

### Resource Management Objectives

#### Winefred Lake

1. To achieve the type of fishery that is most consistent with the expressed interests of the angling public - a fishery exhibiting characteristics of a high quality "stable" fishery to provide good catch rates and a fishery that allows for the opportunity to harvest a large walleye.
2. To maintain the pike stock at its' current status.

### Resource Management Guidelines

#### Winefred Lake

1. Walleye populations are currently managed within Alberta's Walleye Management and Recovery Plan (Berry, 1995). The plan defines four categories of walleye populations (trophy, stable, vulnerable and collapsed) based upon five characteristics of the population (age-class distribution, stability, growth, maturity and angler catch rate). The information from a 1994 creel survey indicates that the walleye population at Winefred Lake has declined. Today, the walleye population shows characteristics more consistent with a "stable - vulnerable" population than a "trophy" population. The Walleye Management and Recovery Plan provides a regulation of 43 cm minimum size limit and a bag limit of 3 to achieve a stable walleye fishery. However, even with the present angling pressure, the large fish will be removed. The best option to achieve the desired fishery characteristics is a 50cm minimum size limit and a bag limit of 3.
2. Currently, the Northern Pike Steering Committee is conducting a provincial review of pike management. It is anticipated that Winefred Lake will be managed in accordance to the regulations and classifications arrived at through this process to maintain a "high-quality" pike fishery.

3. Most respondents were not opposed to a larger minimum size limit (50cm) if it was required to maintain the population. However, few people expressed an interest in developing an "old-growth/unexploited" population if it meant that catch-and-release regulations or a very large minimum size limit (e.g., 60cm) would be necessary to achieve this.
4. The designation of Trophy Waters, including Winefred Lake, has been discontinued in 1998. However, Winefred Lake will continue to be managed to sustain high quality fishing experiences. With the increasing number of anglers at Winefred Lake, and a goal to maintain a high-quality fishery, a change in the minimum size limit will be required.

#### Resource Management Objective

##### Grist Lake

1. To protect the remaining stock of lake trout from further decline and reverse the present decline to allow the population to recover.

#### Resource Management Guideline

##### Grist Lake

1. Although the evidence is largely circumstantial, it is apparent that the lake trout stock has declined significantly. Even at carrying capacity, the theoretical production provides limited opportunity to harvest lake trout. To protect the remaining stock and provide the conditions needed for recovery, the harvest of small lake trout must be curtailed. When presented with the option to choose between catch and release, or a very large minimum size limit, the public favoured the opportunity to harvest a large fish. Although the public has expressed an interest in a large minimum size limit, Fisheries Management will have to assess biologically whether this population can afford any harvest.

Reference: Berry, D. 1995. Alberta's Walleye Management and Recovery Plan.

Alberta Environmental Protection. Natural Resources Service.  
Fisheries Management Division. 32 pp.

## **2.02 WILDLIFE ISSUES**

### Resource Synopsis

The land surrounding Winefred Lake and Grist Lake supports a diversity of wildlife species in varying abundance and a variety of habitats for these species. The habitats can generally be categorized into the following areas: the lake surface and the associated riparian zone, the adjacent forested uplands and muskeg drainage and the drainage area for the Winefred basin.



Quantitative information on wildlife in the Winefred Lake area is limited. Moose and white tailed deer make up the major ungulate species. Woodland caribou, an endangered species in Alberta, and mule deer are also present.

Moose are the main ungulate species that use the upland habitat associated with the lakeshore. To a lesser degree, deer also use the area. Wildlife maps do not designate the Winefred Lake area as a Key Wildlife Area or a significant wintering area for ungulates.

Most species of furbearers in Alberta can be found in relative abundance in the area. In particular, river otter concentrations within the Winefred Lake drainage basin are the highest in the province. Terrestrial species of furbearers include lynx, fisher, coyote, fox, wolf, squirrel, black bears, wolverine and marten. Beaver, muskrat, mink and otter are included in the aquatic listings. Of these species, fisher, lynx, wolverine and otter are considered sensitive species - those that can be negatively affected by over harvesting. Management strategies exist for all these species and range from season duration to species-specific maximum quotas.

Non-consumptive species are those associated with the mature mixed wood boreal forest complex. These forest regimes provide nesting habitats for a variety of neo-tropical warblers and resident birds. No direct census attempts have been made in the immediate area although the Alberta Breeding Bird Atlas does have information for similar areas near Wappau Lake south and west of Winefred Lake. The mixed wood boreal forest is considered internationally significant for nesting neo-tropical migrant bird species. Although little is known about their response to disturbance, current investigations are ongoing regarding forest fragmentation and its impact on utilization rates.

The surface of Winefred Lake and the associated riparian edge provides nesting habitat for waterfowl species (to a limited extent) and for loons, grebes, cormorants and herons. Productivity is relatively low because of the sterile nature of the shoreline and limited nutrient load in the lake. Bald eagles and osprey nest on the shoreline and the treed fringe and are sensitive to disturbance at the nest sites. Nesting colonies of cormorants and great blue herons are found on the island in the northwest corner of the lake. Such colonies are relatively common on suitable sites within the region. Shallow water areas such as creek mouths and the outlet river areas are important feeding areas for eagles and osprey and for river otter during certain times of the year. Reduced availability to use these areas may affect the population survival rate.

#### Overview of Resource Management Objectives and Guidelines

A variety of wildlife species in the planning area could be affected directly or indirectly by any changes in land use practices. Potential impacts could be temporal or spatial in effect and could vary with the species and the timing, duration and intensity of the disturbance. The potential exists for land use in the area to affect the species to some

extent and have major impacts on selected species. Land use planning for the area immediately surrounding the shoreline of Winefred and Grist Lakes is an essential tool of wildlife management. All the various habitats are affected by development within their boundaries.

#### Resource Management Objectives

1. To maintain the diversity, abundance and distribution of all local wildlife species including ungulates, furbearers, carnivores, waterfowl, neo-tropical warblers, other migratory songbirds and other non-game species.
2. To maintain a mosaic of habitat types to optimize populations of wildlife species.
3. To maintain opportunities for consumptive and non-consumptive use of wildlife resources.
4. To provide protection for those species using the riparian zone and those bird species closely associated with backshore nesting and roosting.
5. To maintain minimal impact on terrestrial and aquatic species of mammals and birds.
6. To maintain the largest concentration of river otter in the province.
7. To maintain, and where possible to enhance, the abundance of woodland caribou - an endangered species in Alberta.
8. To maintain the mixed wood boreal forest as an internationally significant forest regime for neo-tropical warblers and other migratory songbirds.
9. To maintain the numbers of sensitive species found in the Winefred Lake area such as fisher, lynx, wolverine and river otter.
10. To maintain the Winefred Lake area as a habitat regime for many different terrestrial species and furbearers.

#### Resource Management Guidelines

1. Fish and wildlife resource considerations are to be incorporated into all land use activities.

2. Various resources may be employed from time to time to maintain and enhance the quality of the habitat. Such measures could include operational restrictions during certain times of the year and access management to reduce the potential for harassment of animals. These measures would be negotiated with the surface lessees.
3. Disturbance of wildlife populations during sensitive time-periods may be minimized.
4. Hunting and trapping will continue with appropriate regulations that ensure the long- term survival of game species.

## **2.03 WATERSHED ISSUES**

### Resource Synopsis

Land-use activities such as oil and gas exploration and development, timber harvesting and commercial recreational development have the potential to affect water quality, quantity and regimen. For the Winefred Lake Planning Area, the principle fish habitat and production concerns are 1) sediment intrusion into critical habitats, 2) de-stabilization of riparian habitats that may be contributory to increases in water temperature, a broadening and shallowing of stream channels and degradation of near-shore lake rearing habitats, 3) altered stream flow regimes that may limit or prohibit fish access at critical periods, and 4) blockages of fish movement.

### Walleye

Walleye are spring spawners and spawn shortly after ice-out, often ascending ice-free tributaries before lakes are ice-free. Walleye spawning occurs in the Winefred River immediately downstream of Winefred Lake for approximately 2 km, in the lower 5-10km of the Sandy River (tributary to Winefred Lake) and the lower 2 km of Grist Creek. The Sandy River supports the bulk of the spawning Winefred Lake walleye. Juvenile rearing occurs in Winefred Lake. Key spawning habitats are the turbulent flow areas below beaver dams or in cobble/gravel riffle areas of the spawning streams.

Maintaining access to spawning grounds is critical; low flows and barriers such as beaver dams or hanging culverts between the lake and prime spawning habitat can contribute significantly to poor recruitment. Although spawning sites have been documented in the aforementioned streams, walleye are not known to spawn in the lake.

### Northern pike

Northern pike are also spring spawners and like walleye, spawn shortly after ice-out. Where pike ascend tributaries to spawn, they may do so before lakes are ice-free. In lakes, pike may spawn along ice-free shorelines before the main lake ice is completely gone. Pike require shallow areas of flooded vegetation for successful spawning. Critical to successful spawning is access to, and the seasonal flooding of, low elevation riparian areas during spring snow melt. In the Winefred Lake Planning Area, northern



pike are known to spawn in the lower reaches of the Sandy River and Grist Creek, the extreme northerly bay on Winefred Lake, the back-shore slough mid-way along the east shoreline of Winefred Lake, the back-shore slough next to the north end of Grist Lake and in an unnamed tributary (locally known as Cameron Creek) on the southwest shore of Grist Lake. It is likely that many other areas also provide suitable spawning habitat depending on water levels.

#### Arctic grayling

Arctic grayling ascend tributaries to spawn at ice-out and require the turbulent flow areas of cobble/gravel riffles for successful spawning. Grayling occur in the Winefred River, Sandy River, Grist Creek and an unnamed tributary (locally known as York Creek) on the southeast shore of Grist Lake. No spawning areas have been confirmed.

#### Lake trout

Lake trout are fall spawners with spawning occurring from mid to late September in Grist Lake. Key spawning habitats are the near-shore clean cobble/gravel areas found along the western shore of the lake.

#### Other species

White and longnose suckers likely spawn in areas used by walleye and select areas within Winefred Lake itself. Lake spawning habitats have not been identified.

Spawning habitats for lake whitefish, tullibee and yellow perch have not been identified at Winefred Lake.

#### Resource Management Objectives

1. To protect the watershed for key fish habitat.
2. To identify watershed areas where further activities should be restricted.
3. To identify particularly sensitive watershed areas where land-use activity has the potential to significantly influence water quality, quantity and regimen.

#### Resource Management Guidelines

1. The area of the RID around Winefred Lake does not include the entire Winefred Lake watershed. The normal Green Zone watershed protection measures must be continued for small projects outside the RID boundaries.
2. Any major projects or a very intensive drilling program must be looked at for the environmental impacts on the Winefred Lake watershed.

## **2.04 DEVELOPMENT CONTROL ISSUES**

### **Resource Synopsis**

Development control in the Winefred Lake and Grist Lake area is both a municipal and a provincial responsibility. The Regional Municipality of Wood Buffalo has authority under the *Municipal Government Act* to regulate development around Winefred Lake and Grist Lake. Municipal development regulations ensure orderly, economical and beneficial development for land use and patterns of human settlement. The Provincial Government's responsibilities include managing the air, water and renewable and non-renewable natural resources.

Development in the Winefred Lake and Grist Lake area requires approval from the Provincial Government and the Regional Municipality. The Provincial Government authorizes the occupation of Crown land through a Miscellaneous Lease, Miscellaneous Permit or Recreational Lease. The Regional Municipality authorizes development through a development permit.

All major recreational development and any development requiring long-term rights to Crown land must be applied on by submission of a Miscellaneous Lease application. All recreational related development is reviewed under the Alberta Tourism and Recreational Leasing (ATRL) Process. To initiate the ATRL Process, an applicant may apply to Alberta Environment to lease Crown land. Alberta Environment then undertakes an initial screening of the application enquiry to determine if the proposal is consistent with the department's broad land use and resource policies, and if the public lands of interest to the developer are available. Providing these initial requirements are met, the department will then circulate the application to provincial and municipal referral agencies for review. If no concerns are identified in this review, a lease or permit may be issued. The lease or permit gives the applicant the authority to occupy the land. Alberta Environment may require additional conditions depending on the sensitivity of the site. Conditions that may be included ensure that the site is well maintained and the site is only used as indicated in the application.

The applicant however, also requires a development permit from the Regional Municipality to develop the land. Until this permit is issued, no development is permitted. A development permit application must be completed by the applicant and submitted to the Regional Municipality. In reviewing a development application, the Regional Municipality will consider the impact the proposed development will have both on and off the site. The Regional Municipality will look at whether there is proper sewage and garbage disposal, potable water supply, fire protection, access to the site and conformance to Federal, Provincial and Municipal statutes and regulations. They will also consider the type of facility and adjacent land uses. The Regional Municipality may also decide other requirements as are necessary, with respect to the nature of a proposed development and the purpose of this Land Use District.

### Resource Management Objective

1. To control development on Winefred Lake to protect the wilderness aesthetics of the lake.

### Resource Management Guidelines

1. Existing approved development plans will be honoured for existing lodge facilities.
2. Negotiate a maximum bed count.

## **2.05 ROADS, SERVICES, AND OTHER ESSENTIAL INFRASTRUCTURE**

### Resource Synopsis

Year round access to the planning area is possible by road vehicle or by air. Floatplanes can land on the lakes and wheeled planes can land on the airstrips. In the northeast part of township 73 and range 5, Grist Lake airstrip is 4 km and Kirby airstrip is 15 km from the south shore of Winefred Lake. Kirby airstrip mainly services oilfield facilities. Construction of secondary Highway 881 from Conklin to Fort McMurray has increased the recreational use of Winefred and Grist Lakes.

In 1980, Amoco Canada Petroleum constructed an all-weather access road to their gas compressor site at Torch Lake (Sec. 25, Twp. 73, Rge. 5, W4M) from the railroad siding at Conklin. The road entered the planning area six miles west of Grist Lake and approximately six miles south of Winefred Lake. With some minor improvements on the existing seismic lines, the road permitted year round, wheeled access (dry weather) to Winefred Lake Lodge on the south shore of Winefred Lake. The road also allowed access to the north shore of Grist Lake. Additionally, indirect access to Grist Lake Lodge on the south shore of Grist Lake became possible. The road did not increase use dramatically, because an all-weather access to Conklin still did not exist. Consequently, most of the increased use at Winefred Lake occurred in the winter months.

Since 1980, several other gas companies have leased mineral rights in the area (Talisman Energy, Amoco Canada, Rio Alto Exploration, Anderson Exploration, Alberta Pacific Forest Industries). In 1984, the provincial government began construction of secondary Highway 881 from Conklin to Fort McMurray. This highway dramatically increased the recreational use of Winefred and Grist Lakes as the population of Fort McMurray began to explore the surrounding area during their free time. Completion of Highway 881 from Conklin to Lac La Biche has opened the area to the remainder of the province.

The Anderson Exploration compressor site at Kirby Lake also provides fairweather access (all weather and/or dry weather) to the southwest corner of Winefred Lake. This access continues to the entire south shore of Winefred Lake and the north shore of Grist Lake.

The Janvier Band reserve is on the north shore of Winefred Lake, at the origin of the Winefred River. This area may eventually have a road (all weather access) from the west. Presently, access is by two wheel drive vehicles in the winter and all-terrain vehicles in the summer.

The east and west sides of Winefred Lake have winter access only. Access for both sides stops within approximately one mile of the shore due to gas production infrastructure access.

Several trappers' cabins also exist on the east and west side of Winefred Lake, but are accessible only by all-terrain vehicle, snowmobile or boat.

#### Resource Management Objective

1. Additional development and access will be restricted.

#### Resource Management Guidelines

##### Existing Infrastructure

1. The planning team will develop the criteria for privatization of the development and operation of the public access and random camping site located in SE sec 26-74-3-w4m.
2. This will be an open competition through a bid proposal process to any interested parties. The size of the development will be restricted to meet the goals of the RID. This development will equate to 20 beds already included in the 175 beds noted in section 2.07.

Note: This will only be carried out if the existing ATRL applicant for this site is unsuccessful in obtaining authorization for his proposed development.

#### Access

1. No new all weather access will be permitted within the RID area.
2. The existing road/trail network will continue to be maintained by the disposition holders involved at their expense. No major upgrading will be permitted other than that required to maintain the roads/trails in their present condition and to insure that the roads/trails do not become an environmental threat. Upgrading of the existing roads and trails to all weather standards will not be permitted.

## **2.06 RECREATION ISSUES**

### Resource Synopsis

Recreational use of the Winefred Lake area consists mainly of fishing, hunting and camping. Use is directly dependent on vehicle access. The existing system of roads places severe restrictions on the type of vehicles that can be used for summer access. Driving to Winefred Lake is difficult and time-intensive, depending on current road conditions. From Fort McMurray, travel time on existing roads can range from

approximately 3.5 to 4 hours in dry conditions to greater than 12 hours in wet weather.

The demand for a high quality walleye fishery is extreme. Fort McMurray and Edmonton already generate far more users than the resource could possibly withstand.

Approximately 75% of users will bring a boat to a recreation resource on a good fishing lake that has fishing and camping as the main activities. Recreational fishing tends to occupy 1 to 6 hours per camping unit per day, with an average use of approximately 4 hours. Only 50% of the boats will usually be on the lake at any given time.

#### Resource Management Objectives

1. To regulate motorized off-highway vehicles to designated access routes.
2. To control existing random activities.
3. To review recreational activities that occur within the planning area to ensure environmental integrity of the resource base is maintained.

#### Resource Management Guidelines

1. To encourage backcountry camping in designated areas.
2. To designate off-highway vehicle access routes.
3. To develop maps and distribute them to the public to show designated access routes and backcountry camping areas.

### **2.07 TOURISM ISSUES**

#### Resource Synopsis

Winefred Lake currently offers a wilderness tourism experience based on fishing and hunting. The area also has the potential to offer other activities to attract tourists. Some of these activities include camping, hiking, wildlife viewing, mountain biking, bird watching, trail riding, snowmobile touring, waterfront activities and exploring the flora and fauna.

As a result of the decision to allow the ATRL applications to proceed through the process, a maximum number of beds allowed for the lake was determined.

The ATRL applicants would be permitted a period of one year to begin construction of approved developments and must have paying guests within two years of the development approval with full bed utilization within three years of the approval.



Any unutilized bed space could be reallocated by the department with a corresponding written notice to the Miscellaneous Lease (MLL) holder indicating the bed allowance reduction.

After comparing bed/lake area statistics for other recreation lakes in the province, it was decided that one bed would be authorized for every 180 ha of lake surface area.

This would allow 175 commercial tourism beds to be developed within the Winefred RID area. At present, when all the proposed developments are included with the existing developments, this bed count has nearly been reached. No increase in the number of beds will be permitted for five years from the date of the approval of this RID. Of the 175 beds, 20 have been allowed for as per sec 2.05, water access point development criteria.

#### Resource Management Objectives

1. To maintain Winefred Lake as a wilderness destination for tourism.
2. To maintain opportunities for wildland recreation activities of a low impact and dispersed nature.

#### Resource Management Guidelines

1. To alleviate user conflict i.e., canoeists versus motor boats, skidoo's versus ice fishing and cross-country skiing where possible.
2. Existing approved development plans will be honoured for the existing lodge facilities.
3. Negotiate maximum size of the two existing lodges while staying within the maximum bed count.

## **2.08 MINERALS AND SURFACE MATERIALS**

#### Resource Synopsis

Active oil and gas development occurs along the south and west portion of Winefred Lake. Presently, the gas fields around the lake are produced by remote control with only roads of an all weather nature required to the plant site. There is also a remote gas recovery system in the area that is piped to the west side of the lake to a plant site. These developments have an effect on land use in the area. They also provide access opportunities for the public. Current regulations limit development within lakeshore buffers.

#### Resource Management Objective

1. To allow minerals exploration and development where conflict with the lakes' recreational, wildlife/ environmental and aesthetic values can be adequately mitigated.

### Resource Management Guidelines

1. No new access is allowed within 400m of the lakes.
2. Seismic must use low impact techniques. Lines within 400m of the lakes must be hand cut.
3. Proponents of minerals exploration and development must develop a strategy with resource managers that addresses:
  - prevention of lake sedimentation and water quality deterioration;
  - protection of lake aesthetics (minimizes visual intrusion);
  - protection of significant habitats;
  - avoidance of important old growth forest; and
  - identification of timing restrictions.

## **2.09 TRAPPING CABINS**

### Resource Synopsis

Eight Registered Fur Management Areas (RFMAs) abut onto Winefred Lake. Each RFMA has one senior holder and any number of junior partners. Those under the age of 18 years can trap without a license if they have the permission of the senior holder.

Fur harvest statistics are available for these trapping areas if required. The area is considered relatively good for the production of most species. Expanses of muskeg may limit aquatic fur production. This area is cyclically productive for lynx and fisher during periods of high hare numbers and is very productive for river otter.

### Resource Management Objective

1. Additional development and access will be restricted.

### Resource Management Guideline

1. No new trapping cabins on lakeshore.

## **2.10 PROPOSED FOREST LAND USE ZONE AND PROTECTIVE NOTATIONS**

### Resource Synopsis

The area covered by the RID surrounds the lakes. It is a fragile area. The majority of the written respondents and open house participants expressed a desire to manage this area in a manner to retain the existing wilderness quality of the environment.

### Overview of Resource Management Objectives and Guidelines

A Forest Land Use Zone (FLUZ) is an area of public land to which legislative controls are applied to achieve specific land use objectives or to solve land use related problems. Forest Land Use Zones are established to regulate recreational and other land uses. FLUZ are management regulations established under the *Forest Act*. They

are used primarily to protect areas containing sensitive resources and to separate or control conflicting recreational activities. Regulations may differ between zones.

The Winefred Lake Forest Land Use Zone (FLUZ) would be the regulatory mechanism to enforce the recommendations of the Winefred Lake Regional Integrated Decision land management plan.

Two areas within the planning area require a higher level of protection. They are outlined on the attached map (Figure 3). The Land Manager recommends that these areas be protected by placing Protective Notations. Protective Notations identify special interest sites for protection. The main objective of Protective Notations is to insure that land activities conform to specific land management criteria.

Upon approval of the Regional Integrated Decision (RID), Alberta Environment staff will carry out the required procedures to put these protective mechanisms in place.

#### Resource Management Objectives

1. Maintain a wilderness experience.
2. Establish a Forest Land Use Zone (FLUZ) as indicated in Figure 3.
3. Placing of a Protective Notation as indicated in Figure 3.

#### Resource Management Guidelines

##### Forest Land Use Zone

1. When a Forest Land Use Zone is put in place for the entire planning area, we will be able to manage random camping and protect the fragile vegetation.
2. Off Highway Vehicle traffic must be prohibited from some areas, but only after posting the areas of concern for a period of one month prior to enforcement action being taken.

##### Protective Notations

1. Existing facilities could remain.
2. Activities must be limited in order to maintain the natural characteristics of the sites.
3. PNG exploration and development will be set back from lakes, creeks and wetlands in order to protect and maintain the environmental values for which these Protective Notations were proposed.



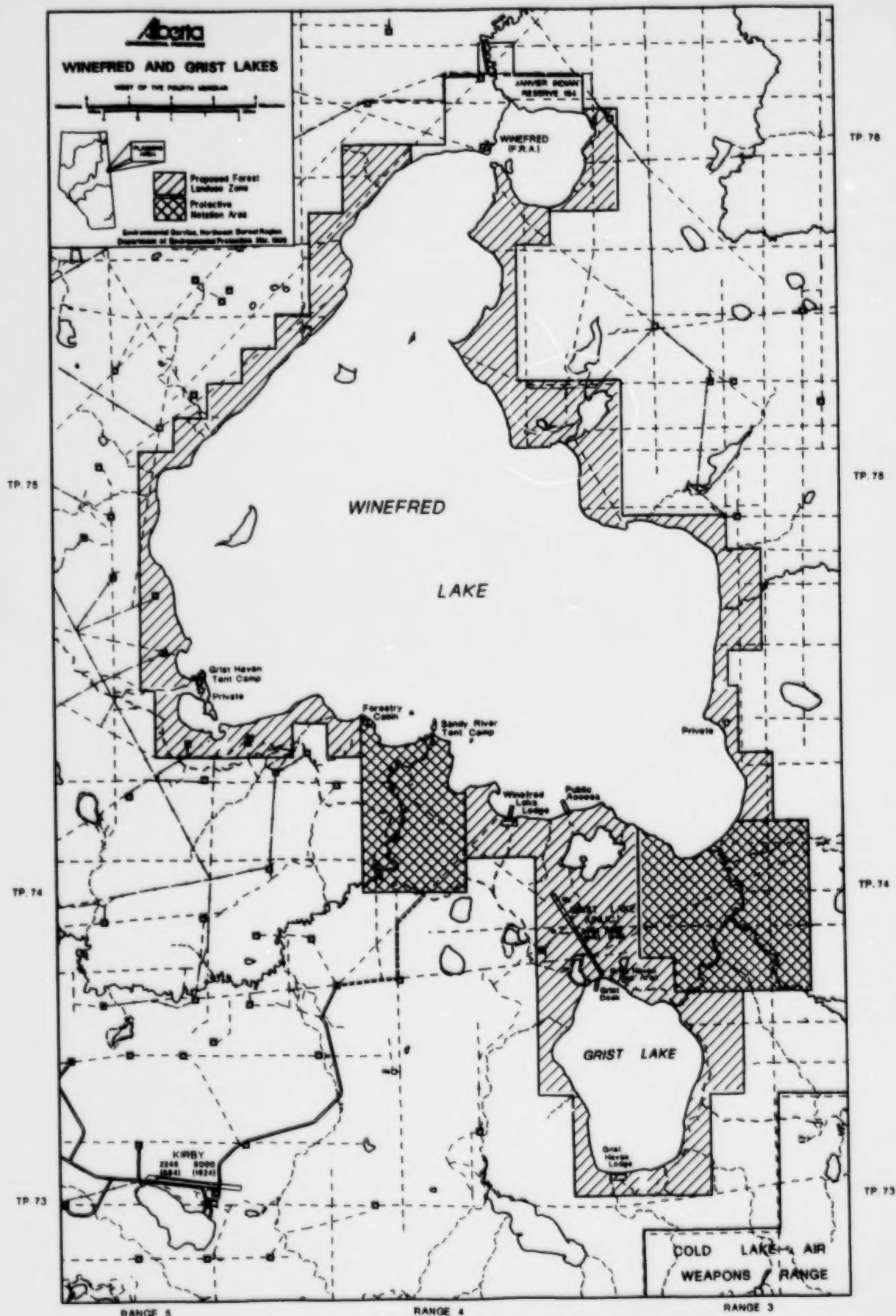


Figure 3 Proposed Forest Landuse Zone and Protective Notation Area



### **3.0 PLAN IMPLEMENTATION, REVIEW, AND AMENDMENT**

The RID will establish the resource management policy for public lands and resources within the Winefred Lake and Grist Lake planning area. It will be a policy document and will not have legal status. It is intended to guide resource managers, industry and the public with responsibility or interests in the area. Land use proposals will be expected to conform to the intent of the RID and to adhere to the objectives and guidelines that will be presented.

#### **3.01 IMPLEMENTATION**

The Winefred Lake and Grist Lake RID will be implemented within an existing framework of relevant legislation, agency responsibilities, policies and administrative mechanisms such as existing systems for referral and interdepartmental review. Implementation of the RID will be the primary responsibility of Alberta Environment under the direction of the Northeast Boreal Region Environmental Resource Committee (ERC). Implementation will include designation as a Forest Land Use Zone and the application of appropriate regulations as indicated in this RID. All participating agencies will assume implementation responsibilities that relate to their own areas of jurisdiction. The resource management activities of all provincial government agencies within the planning area will be conducted in conformance with the provisions of the RID.

#### **3.02 REVIEW**

Monitoring of the effectiveness of the RID will be an on-going process. This will require the efforts of staff from Alberta Environment and the people whom use the area. Formal review of the RID may be required at periodic intervals, with the first formal review to occur no sooner than five years from implementation of the RID. Formal review will occur only after receiving a letter requesting the Regional Land and Forest Service reopen the RID for review in the last six months prior to the January 1st review date. The Northeast Boreal Environmental Resource Committee (ERC) will be responsible for monitoring work accomplishment and compliance with the RID. The ERC will also evaluate the effectiveness and relevance of the provisions of the RID.

#### **3.03 AMENDMENT**

Two kinds of changes will be able to be made to the approved RID:

1. Housekeeping revisions - Minor changes, including non-contentious corrections or updates. This may include corrections or clarifications, etc.
2. Amendments - Any substantive change to the resource management direction in the RID. This includes modification to any provision of the RID that results in a significant change to the allowed resource uses or the priority given to resource uses in all or part of the Winefred Lake and Grist Lake planning area. An amendment to the plan may be required as a result of a government request or because of a request from an individual, group or organization outside the

government. Proposed amendments to the Winefred Lake and Grist Lake RID from outside the government should be made by formal application to the Northeast Boreal Environmental Resource Committee (ERC). If judged necessary by the ERC, opportunities for public review of proposed amendments to the Winefred Lake and Grist Lake RID will be provided before approval of plan amendments.

## **4.0 APPENDIX**

### **A. DISCUSSION PAPERS**

The following Discussion Papers are available upon request:

- Fisheries
- Tourism
- Recreation Opportunity
- Access

To receive a copy, please contact:

Dave Lind

Alberta Environment

Lac La Biche, AB.

Toll Free dial 310-0000, ask for 623-4133